CLAIMS

1) Nanoparticles comprising:

at least one polymer;

at least one compound able to complex said active ingredient; and

at least one active ingredient.

2) The nanoparticles according to Claim 1, wherein at least one of the polymers is a poly(alkylcyanoacrylate) in which the alkyl group may be linear or branched and includes 1 to 12 carbon atoms.

3) The nanoparticles according to Claim 1, wherein the compound able to complex the active ingredient is a cyclic oligosaccharide.

4) The nanoparticles according to Claim 1, wherein the compound able to complex the active ingredient is a neutral or charged, native, branched or polymerized or chemically modified cyclodextrin.

5) The nanoparticles according to Claim 1, wherein the compound able to complex the active ingredient is a cyclodextrin chemically modified by substitution of one or more hydroxypropyls by alkyl, aryl, arylalkyl, glycosidic groups, or by etherification, esterification with alcohols or aliphatic acids.

6) The nanoparticles according to Claim 1, having a size between about 300 and less than about 50 nm.

7) The nanoparticles according to Claim 1, wherein the active ingredient is hydrophilic, hydrophobic, amphiphilic and/or insoluble.

8) The nanoparticles according to Claim 1, wherein the active ingredient is selected from the group consisting of anticancer substances, antisense molecules, antivirals, antibiotics, proteins, polypeptides, polynucleotides, vaccinating substances, immuno-modulators, steroids, analgesics, antimorphinics, antifungals and antiparasitics.

9) The nanoparticles according to Claim 1, wherein the active ingredient is taxol or one of its derivatives.

10) The nanoparticles according to Claim 1, wherein the active ingredient is doxorubicin or one of its derivatives.

11) The nanoparticles according to Claim 1, wherein the active ingredient is a derivative of platinum.

12) The nanoparticles according Claim 1, wherein the active ingredient is present in an amount of about 0.01 to about 300 mg/g nanoparticles.

13) The nanoparticles according to Claim 1, wherein the proportion of compound able to complex the active ingredient is from about 0.1 to about 70% by weight of the weight of the nanoparticles.

14) A method of preparing nanoparticles according to Claim 1, comprising:

a) preparing a complex of the at least one active ingredient with the at least one compound able to complex the latter, in solution in an aqueous or non-aqueous solvent,

b) adding at least one monomer of the polymer in the solution obtained at step (a), and

c) polymerizing the monomer, optionally, in the presence of one or more of a surfactant and/or stabilising agent.

15) A method for preparing nanoparticles according to Claim 1, comprising:

a) preparing nanoparticles by forming an inclusion complex of a poly(alkyl-cyanoacrylate) polymer, and a compound able to complex an active ingredient; and

b) associating the active ingredient with the nanoparticles.

16) The method for preparing nanoparticles according to Claim 15, further comprising:

a) preparing a solution of at least one compound able to complex an active ingredient in an aqueous or non-aqueous solvent;

b) gradually adding at least an alkylcyanoacrylate monomer, to the solution of step (a);

c) polymerizing the monomer, optionally, in the presence of one or more of a surfactant and/or stabilising agent; and

d) after control and optional purification of the nanoparticles obtained at step (c), incubating the particles in a solution of active ingredient in an aqueous or non-aqueous solvent.

17) The method for preparing nanoparticles according to Claim 14, wherein, at step (b), at least one alkylcyanoacrylate monomer is gradually added.

18) The method according to Claim 14, wherein, at steps (a), (b) and (d), the solvent is selected such that, while maintaining conditions of polymerization of the polymers, the solubility of the active ingredient and of the compound able to complex the latter is maintained at a maximum.

19) The method according to Claim 14, wherein step (c) is conducted with no surfactant and/or stabilising agent.

20) The method according to Claim 14, wherein, at step (a) the proportion of compound able to complex the active ingredient is from about 0.1 to about 70 % by weight relative to said active ingredient.

21) A medicinal product with targeted effect and improved therapeutic index produced by the method according to Claim 14.

22) Nanoparticles obtained by the method according to Claim 16.

23) Nanoparticles according to Claim 22, wherein the compound able to complex an active ingredient is selected from the group consisting of a neutral, a charged, a native, a branched, a polymerized, and a chemically modified cyclodextrin.